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ttc	acg	gtg	gcc	gca	gtg	cag	cag	aca Thr	gct 71=	Lve	Δla	Pro	Ala	Gln	ctg Leu	1324
Phe	Thr	vai	Ата	375		GIII	GIII	1111	380	БуБ	2114			385		
+ ~+	a a c	aac	tac	3/3	cta	caa	ago	cta		aag	cto	tgt	gag	agg	ata	1376
Cvs	Glu	Glv	Cvs	Pro	Leu	Gln	Ser	Leu	His	Lys	Leu	Cys	Glu	Arg	Ile	
			390					395					400			
gag	gga	atg	aat	tct	tcc	aaa	aca	aaa	cta	gaa	ctg	caa	aag	cac	ctg	1424
Glu	Gly	Met	Asn	Ser	Ser	Lys	Thr	. Lys	Leu	Glu	Leu	(Gin	гга	His	Leu	
		405	i				410		+	a++		415		att	cag	1472
acg	aca	ı tta	acc	aat	cag	gag	cag	geg Ala	Thr	. all	Phe	. gaa	ı Glu	Val	cag Gln	
Thr	420		1 1111	ASI	GII	425		. HIG			430)				
aaa	ttc	a a a	ccc	aqa	aat	gac	cac	g cga	gag	aat	gaa	a ttg	g att	att	tct	1520
Lys	Lei	ı Arc	Pro	Arg	y Asr	Glu	Glr	Arg	g Glu	Asr	ı Glı	ı Lev	ı Ile	: Ile	s ser	
435	5				440)				445	•				450	1560
ttt	ctg	g aga	a tgt	tta	a tat	gaa	gag	j aaa	cag	j aaa	gaa	a cac	ato	cat vuit	att	1568
				455	5				460)				465		
ggg	g gag	g ato	g aag	g cag	g aca	a tog	g cag	g ato	g gca	a gca	a gag	g aat	att	gga	agt	1616
Gly	/ Gl	ı Met	Lys 470	Glr	n Thi	: Sei	c Gli	n Met 475	: Ala 5	a Ala	a GII	ı Ası	480) GTZ	Ser	
gaa	a tta	a cca	a cc	agt	t gc	act	cga	a ttt	agg	g cta	a ga	t at	g ct	g aaa	aac	1664
Glı	ı Le	u Pro 48	o Pro	Se	r Ala	a Th	r Arg	g Phe O	e Arg	g Lei	ı As	p Met 49!	t ьеі 5	л гр	s Asn	
aaa	a qc	a aad	a ada	a tci	t tta	a ac	a ga	g tci	tt:	a gaa	a ag	t at	t tt	g tc	c cgg	1712
Ьy	s Al	a Ly:	s Ar	g Se	r Le	ı Th	r Gl	u Se	c Le	ı Glı	ı Se	r II	e Le	ı Se	r Arg	
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āā.	t aa	t aa	a gc	c ag	a gg	ct	g ca	g gaa	a ca	u CCC	r Tl	e Se	r Va	g ya l As	t ctg	1,00
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51	J				22	-										

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gat Asp	agc Ser	tcc Ser	ctg Leu	Ser	agt Ser	aca Thr	Leu	Ser	Asn 540	Thr	Ser	Lys	Glu	Pro 545	Ser	
				535 gag	~~~	++~	ccc	atc		gag	agc	tcc	ttt	-	ctc	1856
gtg Val	tgt Cys	gaa Glu	Lys	Glu	Ala	Leu	Pro	Ile	Ser	Glu	Ser	Ser	Phe 560	Lys	Leu	
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ctc	ggc	tcc	tcg	gag Glu	gac	ctg	Cox	cor	Nen	Ser	Glu	Ser	His	Leu	Pro	
		565					570					5/5				1952
gaa	gag	cca	gct	ccg	ctg	tcg	ccc	cag	cag	gee	Dho	۵yy	Ara	Ara	Δla	1332
	580			Pro		585					590					2000
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gcc	cgg	ggg	tcc	ccg	ggg	gtt	tcg	caa	agg	aaa	CEE	atg	agg	T	uic	2040
Ala	Arg	Gly	Ser	Pro 615	Gly	Val	Ser	Gln	Arg 620	гуѕ	ьeu	Met	Arg	625	nis	2006
tca	qtg	agc	aca	gag	acg	cct	cat	gaa	cga	aag	gac	ttt	gaa	tcc	aaa	2096
Ser	Val	Ser	Thr	Glu	Thr	Pro	His	Glu 635	Arg	ГÀЗ	Asp	Pne	640	Ser	пув	
аса	aac	cat	ctt	ggt	gat	tct	ggt	ggg	act	cct	gtg	aag	acc	cgg	agg	2144
Ala	Asn	His	Leu	Gly	Asp	Ser	Gly 650	Gly	Thr	Pro	Val	ьуs 655	Thr	Arg	Arg	
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His	Ser	Trp	Arg	Gln	Gln	Ile 665	Phe	Leu	Arg	Val	670	rnr	Pro	GIII	пуъ	
aca	+~~	gat	tct	tcc	agc	aga	tat	gaa	gat	tat	tca	gag	ctg	gga	gag	2240
Ala	Cvs	Asp	Ser	Ser	Ser	Arg	Tyr	Glu	Asp	Tyr	Ser	Glu	Leu	Gly	Glu	
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Leu	Pro	Pro	Arg	Ser 695	Pro	Leu	Glu	Pro	700	Cys	GIU	ı Asp	GIY	705	PILE	
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Glv	Pro	Dro	Pro	Glu	Ğlu	Lvs	Lys	Arg	Thr	Ser	Arg	g Glu	Leu	Arg	Glu	
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cto	taa	caa	2 2 2 0	act	att	ctt	caa	cag	ata	ctg	g cto	g ctt	aga	atg	gag	2384
Len	Trr	Glr	n Tivs	Ala	Ile	Leu	Glr	ı Gln	Ile	. Lev	ı Let	ı Let	ı Arg	Met	Glu	
		725	5				730)				735)			
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Lvs	Gli	. Ast	n Glr	l Lvs	Leu	Gln	ιĀlā	a Ser	Glu	ı Asr	n Asp	, Le	ı Lev	ı Asr	Lys	
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cac	, ctc	1 22	a cto	gat	tat	gaa	gaa	att	act	ccc	tgt:	t ctt	: aaa	ı gaa	gta	2480
Arc	r Lei	ı Lv:	s Lei	ı Asp	Tyr	Glu	ιĞlι	ı Ile	Thr	r Pro	о Суя	s Lev	т ГА	: Glu	ı var	
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201	- 200	a ato	a tad	g gaa	aac	ato	ctt	t ago	act	cca	a gga	a aga	a tca	a aaa	att	2528
The	Thi	· Va	l Tri	o Glu	ı Lys	Met	: Le	u Sei	Thi	r Pro	o Gly	y Ar	g Sei	c Lys	: Ile	
				775	5				780)				/83	•	
220	· ++1	- da	c ato	т паа	aaa	ato	a ca	c te	ggct	t gti	t gg	g ca	a ggt	gtg	g cca	2576
Tare	Dha	- Σα.	n Mei	t Gli	ı Lvs	Met	Hi	s Sei	r Āla	a Vai	1 G1;	y Gl	n Gly	y Va∶	l Pro	
			79	n				799	5				800	,		
cci	- cai	t ca	c ca	a aat	. gaa	ato	t ta	g aaa	a tti	t ct	a gc	t ga	g caa	a tto	cac	2624
7000	- Ui	c ui	e Are	a Gly	z Gli	1 Tle	Tr	b Lv:	s Phe	e Le	u Al	a Gl	u Gl	n Phe	e His	
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TO	u ade	u Ca	ري د ما	n Dha	pro	Se	r Lv	s Gl	n Gl	n Pr	о Ly	s As	p Va	l Pro	o Tyr	
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22		- at	c tt	a aad	g ca	a cto	я ас	t tc	с са	g ca	g ca	t gc	g at	t ct	t att	2720
ad: The	מ פו	u T.e	u Le	u Lv	s Gli	n Le	u Th	r Se	r Gl	n Gl	n Hi	s Al	a Il	e Le	u iie	
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GS.	a at	t aa	ia ca	a ac	c tt	t cc	t ac	a ca	c cc	a ta	c tt	c to	t gc	c ca	g ctt	2768
5⁴		- 55		_												

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				855					860					865		
gga	gca	gga	cag	cta	tcg	ctt	tac	aac	att	ttg	aag	gcc	tac	tca	ctt	2816
			Gln 870					875					880			0054
cta	gac	cag	gaa	gtg	gga	tat	tgc	caa	ggt	ctc	agc	ttt	gta	gca	ggc	2864
Leu	Asp	Gln 885	Glu	Val	GIA	Tyr	Cys 890	GIn	GIY	ьеи	ser	895	vai	нια	Gry	
att	t.t.a	ctt	ctt	cat	atq	agt	gag	gaa	gag	gcg	ttt	aaa	atg	ctc	aag	2912
Ile	Leu	Leu	Leu	His	Met	Ser	Glu	Glu	Glu	Ala	Phe	Lys	Met	Leu	Lys	
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ttt	ctg	atg	ttt Phe	gac	atg Met	999	Len	Ara	Lvs	Gln	Tyr	Arq	Pro	Asp	Met	
915					920					925					930	
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Ile	Ile	Leu	Gln	Ile	Gln	Met	Tyr	Gln	Leu	Ser	Arg	Leu	Leu	н1S 945	Asp	
	a a a	202	gac	935 ctc	tac	aat	cac	cta	940 gag	aaa	cac	qaq	atc		ccc	3056
Tvr	His	Ara	Asp	Leu	Tyr	Asn	His	Leu	Glu	Glu	His	Glu	Ile	Gly	Pro	
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agc	ctc	tac	gct	gcc	ccc	tgg	ttc	ctc	acc	atg	ttt	gcc	tca	cag	ttc Dhe	3104
Ser	Leu		Ala	Ala	Pro	Trp	Phe 970	Leu	Thr	мес	Pne	975	Ser	GIII	PHE	
cca	cta	965 gga	ttc	αta	acc	aga	atc	ttt	gat	atg	att	ttt	ctt	cag	gga	3152
Pro	Leu	Gly	Phe	Val	Ala	Arg	Val	Phe	Āsp	Met	Ile	Phe	Leu	Gln	Gly	
	980					985					990					3200
aca	gag	gtc	ata Ile	ttt	aaa	gtg	gct	tta	agt	ctg	t t g	gga	Ser	His	aag Lvs	3200
Thr 995		vaı	TIE	Pne	ьув 100	vа. 0	Ата	пец	Ser	100	5	-			1010	
ccc	tta	att	ctg	cag	cat	gaa	aac	cta	gaa	acc	ata	gtt	gac	ttt	ata	3248
Pro	Leu	Ile	Leu	Gln	His	Glu	Asn	Leu	Glu	Thr	Ile	Val	Asp	Pne	11e	
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aaa	ago	acg	cta Leu	Pro	aac Asn	Leu	Glv	Leu	Val	Gln	Met	Glu	Lys	Thr	atc Ile	
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aat	cag	gta	ttt	gaa	. atg	gac	ato	gct	aaa	cag	tta	caa	gct	tat	gaa	3344
Asr	ı Gln			Glu	Met	Asp	11e	: ATa	гга	GIN	. цео	105	. Ата 55	гтут	Glu	
att	- dad	104 tac	cac	ato	ctt	caa	qaa	qaa	ctt	ato	gat	tcc	tct	cct	ctc	3392
Va]	l Glu	Tyr	His	Val	Lev	Gln	Glu	ı Ğlu	Let	ı Ile	Asp	Ser	Ser	Pro	Leu	
	106	0.				106	5				107	0				3440
agt	gac	aac	caa	aga	ato Mot	gat	aaa	tta Ter	ı gaç	g aaa 1 Lys	t acc	: aac - Asr	. agc	. ser	tta Leu	3410
101	75				108	30				108	35				1090	
car	- 222	a cag	g aac	ctt	gad	cto	: ctt	gaa	a caç	g ttg	cag	gt	gca	a aat	ggt	3488
Arg	д Гуз	s Glr	ı Asr	ı Lev	ı Ası	Lev	ı Leı	ı Glı	ı Glr	ı Let	ı Glr	ı Val	LALa	a Asr 110	ı GIY	
	+ <i>-</i>		200	109	95 - ~a	, ac	aco	- att	110 gag		r cto	cto	a aq		gag	3536
Are	g ald	Gli	ı ayı	Lei	ı Glı	ı Ala	Th	r Ile	e Gli	Lys	Lei	ı Lei	ı Sei	r Sei	Glu	
			111	LO				11:	15				112	20		2504
ag	c aag	g ct	g aag	g cas	g gc	ato	g cti	t acc	tta	a gaa	a cto	g gag	g cgg	g tcg	g gcc	3584
Se	r Ly:	s Le:		3 Gli	J AT	а мет	: Le	30 1111	г пе	u Gi	т пе	111	35	9 00.	r Ala	
ct	a cto	a ca	acc	a ato	g ga	g gag	a ct	g cg	g cg	g cgg	gag	c gca	a ga	g cc	agc	3632
Le	u Le	u Gl	n Th	va.	l Gl	u Gli	ı Le	u Ar	g Ar	g Arg	g Se:	r Ala	a Gl	u Pro	o Ser	
	11	40				114					11!		a aa	a ta:	a	3677
ga	c cg	g ga	g cci u Pro	t gag	g tg	c ac	g car	g cc	c gay	y CC u Pro	ace o The	9 99' r Gl	c ya y Asi	c cy	•	55,7
11	55				11	60				110	65					
ca	acto	tgca	gga	gaga	t.t.a	caac	acca	tc c	caca	ctgt	c ca	ggcc	ttaa	ctg	agaggga	3737
ca	gaag	acgc	tgg	aagg	aga	gaag	gaag	cg g	gaag	tgtg	c tt	ctca	ggga	gga	aaccggo	: 3797

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gaa cca at Glu Pro I	ta aca ttc le Thr Phe	aca gca a Thr Ala A	agg aaa Arg Lys 10	cat ct His Le	g ctt eu Leu	cct aa Pro As 1!	on Ora	gtc	226
Ser Val A	at ttt ggc sp Phe Gly	Leu Gln I	Leu Val 25	GIY Se	er Leu	30	ai nis	BCI	274
ctg acc a Leu Thr T	cc atg ccc hr Met Pro	Met Leu 1	Pro Trp	Val Va	al Ala 45	GIU V	ar Arg	Arg	322
ctc agc a Leu Ser A	gg cag tcc rg Gln Ser	Thr Arg .	Lys Giu	Pro v.	ai iii 0	пув О	111 141	65	370
Leu Cys V	tt tca ccc al Ser Pro 70	Ser Gly	Leu Arg	75	Iu PIO	GIU F	80	1112	418
Ser Gln G	ag tgg gat In Trp Asp 85	Pro Leu	Ile Tyr 90	ser s	er lie	9	itu Cys 5	цув	466
Pro Gln A	gt gtt cac arg Val His	Lys Leu	Ile His	Asn S	er His	110	10 ser	I Y I	514
ttt gct t Phe Ala (gt ctg att ys Leu Ile	aag gaa Lys Glu 120	gac gct Asp Ala	gtc c	ac cgg Iis Arg 125	cag a	gt atc Ser Ile	tgc Cys	562
Tyr Val I	tc aaa gcc Phe Lys Ala	gat gat	caa aca Gln Thr	. газ л	gtg cct Val Pro L40	gag a Glu l	atc atc [le Ile	agc Ser 145	610
130 tcc atc o Ser Ile A	egt cag gcg Arg Gln Ala	ggg aag Gly Lys	atc gcc Ile Ala	caa c	ag gag	gag (Glu l	ctg cac Leu His 160	Cys	658
ceg tec	150 gag ttc gac	gac acg	ttt tcc		aag ttc	gag			706

Pro Ser Glu Phe Asp Asp Thr Phe Ser Lys Lys Phe Glu Val Leu Phe 165 170 175																	
180	e = :			175					170					165			
Cys Gly Arg Val Thr Val Ala His Lys Lys Ala Pro Pro Nai Leu 118 180 185 190 39ac gag tgc atc gag aag ttc aat cac gtc agc ggc agc cgg ggg tcc Asp Gly Ser Lys Die Glu Lys Phe Asn His Val Ser Gly Ser Arg Gly Ser 200 39a gac ccc cgc ccc aac cgc ccc cat gcc ggc ggc ccc aca ggg agc cag cgg agc cgg cag cgg ggc cag cgc gag ccc gag gcc cag agc cgg agc cag cgc gag ccc cag ccc aca gcc ggc ccc gcc g	754	atc	ctg a	gcc	ccg	ccg	gct	aag	aag	cac	gcg	gtg	acg	gtg	cgc	ggc	tạc
gac gag tgc atc gag aag ttc at cac gtc agc ggc agc cgg ggg tcc 892 895 61u Cys Ile Glu Lys Phe Asn His Val Ser Gly Ser Arg Gly Ser 892 892 892 892 893 892 893 893 895 893 850 <		rie	Leu .	Ala .	Pro . 190	Pro	Ala	Lys	Lys	His 185	Ala :	Val	Thr	Val	Arg 180	Gly	Cys
Asp Glu Cys Ile Glu Lys Phe Asn His Val Ser Gly Ser Arg Gly Ser 195 200 205 gag agc ccc cgc ccc aac ccg ccc at gcc gcc cac ag ggg agc cag cag cag agc cac gg ccc as gcc gcc cac ag ggg agc ccc gg ccc as gcc gcc aca ggg agc cag cag cag agc cag ggc ct gt gas ggc ct gt ggc gcc atg cgc aatg ccc ttc tcc cag ccc ggc ctg gas ctg tgc cat gas ggc ct tcc cag agc cag agc cag ggc ctc gt ggc ttt agg aag gag ctg cag gat ggg ggc ctc cga agc 245 ggc ctt agg agg agg ctg cag gat ggg ggc ctc gas agc 245 ggc ctt agg agg agg agg agg agg agg agg agg a	802	tcc	aaa .	cgg	agc	ggc	agc	gtc	cac	aat	ttc	aag	gag	atc	tgc	gag	qac
Sur Pro Agr Pro Agn Pro Pro His Ala Ala Pro Thr Gly Ser Gln		ser	GIY	Arg	Ser .	Gly 205	Ser	Val	His	Asn	Phe 200	Lys	Glu	Ile	Cys	Glu 195	Asp
Sur Pro Agr Pro Agn Pro Pro His Ala Ala Pro Thr Gly Ser Gln	850	cag	agc	9 99	aca	ccc	gcg	gcc	cat	ccc	ccg	aac	ccc	cgc	ccc	age	qaq
210		GIN	Ser	Gly	Thr	Pro	Ala	Ala	His	Pro	Pro	Asn	Pro	Ārg	Pro	Ser	Glu
Simple S	000	225					220					215					210
Simple S	898	ctg -	ggc	ccc	cag	tcc	ttc	tcc	aag	cgc	atg	CCC	agg	cgc	gtg	cct	gag
Cage tend of the Arg Lys Giu Leu Gin Asp Gily City Leu Arg Ser Leu Ala Phe Arg Lys Giu Leu Gin Asp Gily City Leu Arg Ser 255 255 255 255 255 250 255 255 250 255 250 255 255 265 265 265 265 265 265 265 265 265 265 265 265 265 270 285 211e Giu Asn His Leu 260 270 285 286 285 287 281 181 281 281 281 281 281 282 285 283 283 282 282 283 283 283 <td></td> <td>Leu</td> <td>240</td> <td>Pro</td> <td>GIn</td> <td>ser</td> <td>Phe</td> <td>Ser 235</td> <td>Lys</td> <td>Arg</td> <td>Met</td> <td>Pro</td> <td>Arg 230</td> <td>Arg</td> <td>Val</td> <td>Pro</td> <td>Glu</td>		Leu	240	Pro	GIn	ser	Phe	Ser 235	Lys	Arg	Met	Pro	Arg 230	Arg	Val	Pro	Glu
Arg Ser Leu Ala Phe Arg Lys Glu Leu Gln Asp Gly Gly Leu Arg Ser 245 250 255 255 255 255 255 255 255 255 25	946	agc	cga	ctc	ggc	ggg	gat	cag	ctg	gag	aag	agg	ttt	gcc	ctg	tcg	cgc
Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Ash His Leu 260		ser	Arg	Leu 255	GIA	Gly	Asp	Gln	Leu 250	Glu	Lys	Arg	Phe	Ala 245	Leu	Ser	Arg
Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp II e Glu Ash His Leu 260	994	ctc	cac	aac	gag	att	gac	agc	gag	gag	ttc	tcc	agc	ttc	ttc	ggc	agc
The Ser Gly His Asn The Val Gln Pro Thr Asp The Glu Glu Asn Arg 275 280 285	1010	ьeu	HIS	Asn	G1u 270	Ile	Asp	Ser	Glu	Glu 265	Phe	Ser	Ser	Phe	Phe 260	Gly	Ser
The Ser Gly His Asn Ile Val Gln Pro Thr Asp Ile Glu Glu Asn Arg 275	1042	cga	aat	gaa	gag	atc	gat	aca	CCC	cag	gtg	att	aat	cac	gga	agc	att
Thr Met Leu Phe Thr I Ie Gly Gln Ser Glu Val Tyr Leu Ile Ser Pro 305 gac acc aaa aaa ata gca ttg gag aaa aat ttt aag gag ata tcc ttt 1138 Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser Phe 310 tgc tct cag ggc atc aga cac ggg gac cac ttt ggg ttt atc tgt cgg 1186 Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys Arg 325 gag tct tcc gga ggt ggc ggc ttt cat ttt ggg ttt atc tgt cgg 1186 Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys Arg 335 gag tct tcc gga ggt ggc ggc ttt cat ttt ggc ttt acg ggt ttt acg 1234 Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys Gln 355 gcc ttc acg gtg gcc gca gtg cag cag aca att atg atg acc ctg aaa cag 1282 Cys Thr Asn Glu Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala Gln 370 ctg tgt gag ggc tcc cc ctg caa agc ctg cac aag ctc tgt gag agg 1378 Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu Arg 390 ata gag gga atg att tct tcc aaa aca cac aca ctg cac aag ctc ttt gag agg 1378 Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu Arg 390 ata gag gga atg aat tct tcc aaa aca cac aca ctg cac aag ctc ttt gag agg 1378 Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Glu Leu Gln Lys His 405 ctg acg aca tta acc aat cag gag cag cag aca act ttt ttt gag ag agg ttt ttt ttt gag agg 147 Ato 425 Cag aaa ttg aga ccg aga aat tct tcc aaa acc aca aca ctg cac aag ctc ttt ttt gag agg 147 Ato 425 Ato 465 Ato 475 Ato	1000	Arg	Asn	Glu	Glu	11e 285	Asp	Thr	Pro	Gln	Val 280	Ile	Asn	His	Gly	Ser 275	Ile
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Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys Arg 325 gag tct tcc gga ggt ggc ggc ttt cat ttt gtc tgt tac ggt ttt cag Glu Ser Ser Gly Gly Gly Gly Phe His Phe Val Cys Try Val Phe Gln 340 tgc aca aat gag gct ctg gtt gat gaa att atg atg acc ctg aaa cag Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys Gln 355 gcc ttc acg gtg gcc gca gtg cag cag cag aca gcc aag gcg cag gcc cag Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala Gln 370 atg gag ggc tgc ccc ctg caa agc ctg cac aag ctc tgt gag agg Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu Arg 390 ata gag gga atg aat tct tcc aaa aca aca aca cag acc ttg cac aag ctc tgt gag agg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys His 400 cag aca tta acc aca cag gag aca at gag cag cag aca cta ttt gaa gag gtt Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu Val 420 cag aaa ttg aga ccg aga aat gag cag cag cag aca cag aca cag aca cag aca cag Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile Ile 435 tct ttt ctg aga tgt tta tat gaa gag aca cag aca gag aca cag aca aca	1106		320					315					310				
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355		Gln	Lvg	Len	Thr	ary Met	aug Me+	מננ	gaa	gat	gtt	ctg	gct	gag	aat	aca	tgo
Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala Gln 370	1330					365					360					355	
370		Gln	Δla	Pro	71°	Lve	71 ~	aca The	cag	cag	gtg	gca	gcc	gtg	acg	ttc	gcc
270 ctg tgt gag ggc tgc ccc ctg caa agc ctg cac aag ctc tgt gag agg 1378 Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu Arg 390 395 400 ata gag gga atg aat tct tcc aaa aca aca aca cta gaa ctg caa aag cac 1426 Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys His 415 ctg acg aca tta acc aat cag gag cag gcg act att ttt gaa gag gtt 1474 Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu Val 420 cag aaa ttg aga ccg aga aat gag cag cag gag aat gaa ttg att att 1522 Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile Ile 430 tct ttt ctg aga tgt tta tat gaa gag aaa cag aaa gaa cac atc cat 1570 Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile His 465 att ggg gag atg aag cag cag cag aca tcg aga gag aat att gga 1618 Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile Gly 470 agt gaa tta cag cag tta ctg cag agt tta dat aca aaa cag act cag att att att att att att att att att a		385	<u> </u>		мта	пλя	YT C	TIIL	GIII	GIN			. А1а	val	Thr		
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Arg	Gly 515	Asn	ГÀг	Ala	Arg	Gly 520	Leu	Gin	Glu	HIS	525	шe	ser	vai	Asp		
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cac	tca	gtg	agc	aca	gag	acg	cct	cat	gaa	cga	aag	gac	ttt	gaa	tcc	2098	
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			645					650					655	Thr			
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Arg	His	Ser 660	Trp	Arg	Gln	Gln	Ile 665	Phe	Leu	Arg	Val	670	Thr	Pro	GIII	00.40	
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Glu	Lev	ı Pro	Pro	Arg	Ser	Pro	Leu	Glu	Pro	Val	Cys	Glu	ı Asp	Gly	Pro		
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	751	5				760)				765	5			Glu	2520	
gta	act	t ac	a gt	g tgg	g gaa	aag	ato	ctt	ago	act	CC6	a gga	a aga	a tca	aaa Tys	2530	
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tac Tvr	aaa Lvs	820 gaa Glu	ctc Leu	tta Leu	aag Lys	cag Gln	cta	act Thr	tcc Ser	cag Gln	cag Gln	cat	gcg Ala	att Ile	ctt Leu	2722
a++	835	ctt	aaa	cga Arg	acc	840 ttt	cct	aca	cac	cca	845 tac	ttc	tct	gcc	cag	2770
850				cag	855					860					865	2818
Leu	Gly	Ala	Gly	Gln 870	Leu	Ser	Leu	Tyr	Asn 875	Ile	Leu	Lys	Ala	880	ser	
ctt Leu	cta Leu	gac Asp	cag Gln 885	gaa Glu	gtg Val	gga Gly	tat Tyr	tgc Cys 890	caa Gln	ggt Gly	ctc Leu	agc Ser	Phe 895	gta Val	gca Ala	2866
ggc Gly	att Ile	Leu	ctt	ctt Leu	cat His	atg Met	Ser	gag	gaa Glu	gag Glu	gcg Ala	ttt Phe 910	ьys	atg Met	ctc Leu	2914
aag Lys	ttt Phe	900 ctg Leu	atg Met	ttt Phe	gac Asp	atg Met	905 905	ctg Leu	cgg Arg	aaa Lys	Gln	tat	cgg	cca Pro	gac Asp	2962
ato	915 att	att	tta	cag Gln	atc	920 caq	atq	tac	cag	ctc	925 tcg	agg	ttg	ctt	cat	3010
930 gat	tac	cac	aga	gac	935 ctc	tac	aat	cac	ctg	940 gag	gag	cac	gag	atc	ggc	3058
				950					955					960	Gly cag	3106
Pro	Ser	Leu	Tyr 965	Ala	Ala	Pro	Trp	Phe 970	Leu	Thr	Met	Phe	975	ser	GIH	
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gga Gly	aca Thr	gag	atc	ata Ile	ttt Phe	Lys	gtg Val	gct Ala	tta Leu	agt Ser	Leu	Lev	gga Gly	agc Ser	cat His	3202
aag Lvs	995 ccc Pro	tta	att Ile	ctg Leu	cag Gln	100 cat His	qaa	aac Asn	cta Leu	gaa Glu	100 acc Thr	ata	gtt Val	gac Asp	ttt Phe	3250
101	0				101	.5				102	0				1025 acc	3298
Ile	. Lys	Ser	Thr	Leu 103	Pro	Asn	Leu	Gly	7 Leu 103	ı Val 35	. Glr	ı Met	: GIU	г ьуг 104	o Thr	
ato Ile	aat Asr	cag Glr	g gta Val 104	. Phe	gaa Glu	atg Met	gac Asp	ato 116	e Ala	a Lys	cag Glr	g tta 1 Lei	a caa ı Glr 105	ı Ala	tat Tyr	3346
gaa Glu	a gtt ı Val	l Gli	tacı Tyı	cac	gto Val	ctt Leu	ı Glr	gaa Glu	a gaa	a ctt ı Lev	ato 1 Ile	gat Asp 10	t tco Sei	tct	cct Pro	3394
cto Lev	c agt ı Sei	106 gad Asp	aac	c caa n Glr	a aga	a ato g Met	106 g gat Asp	: aaa	a tta s Lei	a gag u Glu	т ГА	a aco	c aac	ago n Sei	agc Ser	3442
tta	107 a cgc	~ aaa	a cag	g aac	ctt	108 gad	cto	c cti	t gaa	a caq	108 g ttg n Lei	g cag	g gte n Val	g gca l Ala	a aat a Asn	3490
109	90	ato	c caa	a ago	109 c ctt	95 : gag	a ac	ace	c at	110 t gag	oo gaaq	g ct	c ct	g ago	agt	3538
Gl	y Ar	g Ile	e Gl	n Sei 111	r Lei 10	ı Glı	ı Ala	a Th:	r Il. 11	e Gl: 15	ı Ly:	s Le	u Le	112	r ser	3586
Gl	u Se	r Ly	s Let	u Lys 25	s Gl	n Ala	a Met	Le:	u Th: 30	r Le	u GI	u Le	u G1. 11	u Arg 35	g ser	
gc	c ct	g ct	g ca	g ac	g gt	g ga	g ga	g ct	g cg	g cg	g cg	g ag	c gc	a ga	g ccc	3634

			₹.												
Ala 1		1140					1145					1150			
agc (Asp .	cgg Arg	gag Glu	cct Pro	Glu (tgc a Cys ' 1160	acg (Thr (cag Gln	ccc Pro	Glu	ccc Pro 1165	acg Thr	ggc (Gly)	gac Asp	tga *
~~~	1155 tata	a	a a a a a	astt			catc	cca	cact			cctt	aa c	tgag	aggga
cage	cccg	ca y	gaya gasa	gacc	a da	agga	agcg	gga	agtq	tac	ttct	cagg	ga g	gaaa	ccggc
ttaga	ayac	gc c	ggaa tana	9949 ++c+	t ac	assc.	ticca	act	taca	att	cagg	qqqc	at q	tccc	agtgt
++++	ttta	tt a	++++	taga	t ac	taaa	tcat	ccc	ttct	cca	gtcc	tgat	ta c	tgta	cacag
tage	ttta	ga t	aaca	taga	c at	gaat	aaat	qca	actt	atg	tttt	aaaa	aa a	aaaa	aaaaa
aaaa		<b>J</b> ~ -	55-5	-55		J		_		_					
<210	> 5 > 11	68													
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			apie	ns											
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Met	Glu	Pro	Ile	Thr	Phe	Thr	Ala	Arg		His	Leu	ьeu	Pro	ASI	GIU
1				5	~-7	_	<b>a</b> 1	T	10	a1	Cor	Ton	Dro	15 Val	Hic
			20		Gly			25					30		
Ser	Leu	Thr 35	Thr	Met	Pro	Met	ьеи 40	Pro	Trp	vai	vai	45	GIU	vai	AIG
Arg	Leu	Ser	Arg	Gln	Ser			Lys	Glu	Pro	Val	Thr	Lys	Gln	Val
	50	_		<b>.</b> .	<b>D</b>	55	<b>a</b> 1	T 011	7 ~~	Crrc	60 Glu	Dro	Glu	Pro	Glv
	Leu	Cys	vaı	Ser	Pro 70	ser	GIÀ	ьeu	Arg	75	Giu	FIO	Giu	110	80
65 Ara	Ser	Gln	Gln	Trp	Asp	Pro	Leu	Ile	Tyr		Ser	Ile	Phe	Glu	Cys
				85					90					95	
Lys	Pro	Gln	Arg 100	Val	His	Lys	Leu	Ile 105	His	Asn	Ser	His	110	Pro	ser
Tyr	Phe	Ala	Cys	Leu	Ile	Lys	Glu		Ala	Val	His	Arg	Gln	Ser	Ile
_		115					120					125			
Cys		Val	Phe	Lys	Ala		Asp	Gln	Thr	Lys	Val 140	Pro	Glu	тте	iie
Com	130	тlь	λκα	Gln	Ala	135	Lvs	Tle	Ala	Ara		Glu	Glu	Leu	His
145	ser	TTE	Arg	Gili	150	Ory	цуб	110	1120	155					160
Cvs	Pro	Ser	Glu	Phe	Asp	Asp	Thr	Phe	Ser	Lys	Lys	Phe	Glu	Val	Leu
_				165					170					175	
Phe	Cys	Gly	Arg	Val	Thr	Val	Ala		Lys	Lys	Ala	Pro		Ala	Leu
_			180	-1.	<b>a</b> 1	<b>.</b>	Dh a	185	ui a	170 ]	Cor	Glv	190	Δrα	Glv
Ile	Asp	G1u 195		тте	Glu	гув	200	ASII	птв	vaı	Ser	205	561	Arg	GIJ
Ser	Glu	Ser	Pro	Arg	Pro	Asn		Pro	His	Ala		Pro	Thr	Gly	Ser
	210		_		_	215		•	<b>T</b>	G	220	002	al n	Dro	Gl ₃₇
		Pro	Val	Arg	Arg	Pro	Met	Arg	гуз	235		ser	GIII	PIO	240
225	3	0	T 0	7.7.	230 Phe	7. ~~~	Lare	Glu.	T.e.ii			Glv	Glv	Leu	
ьeu	Arg	ser	ьeu	245		Arg	цуъ	Giu	250		пор	<b>0</b> -1	0-1	255	J
Ser	Ser	Gly	Phe		Ser	Ser	Phe			Ser	Asp	Ile	Glu	Asn	His
			260		_			265		(m)	7	T1.	270		λαπ
Leu	Ile	Ser 275		His	Asn	He	Val 280		Pro	Thr	Asp	285		Giu	ASII
Arq	Thr	Met	Leu	Phe	Thr	Ile			Ser	Glu	Val	Tyr	Leu	Ile	Ser
	290					295					300				
		Thr	rys	Lys			Leu	Glu	гув	ASD	rne	гув	GIU	тте	Ser 320
305	~-		. ~1		310	7~~	u;~	V-1	Δer	315 His		Glv	Phe	Ile	Cys
Phe	cys	ser	GIN	325		Arg	urs	val	330		1110	Y		335	-1-
Arq	Glu	Ser	Ser	Gly	gly	Gly	Gly	Phe			val	Cys	Tyr		Phe
				_											

			•	•											
			340					345		_			350	т	T
Gln C							360					505			
Gln A	la 1	Phe				<b>375</b>					300				
Gln L	eu (	Cys	Glu	Gly	Cys 390	Pro	Leu	Gln	Ser	Leu 395	His	Lys	Leu	Cys	Glu 400
385 Arg I	le	Glu	Gly	Met	Asn	Ser	Ser	Lys	Thr 410	Lys	Leu	Glu	Leu	Gln 415	Lys
His L	eu	Thr	Thr	405 Leu	Thr	Asn	Gln	Glu	Gln	Ala	Thr	Ile	Phe 430	Glu	Glu
Val G			400					4 / 7				Asn			
Ile S							440				Gln	せせつ			
						455					400				Ile
					470					4/2					
Gly S				405					490					100	
Lys A			-					רט רי					<b>J T V</b>		
Ser A							520					222			
Asp 1						E 3 5					2740				
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545 Lys					Ser	Glu			5/1	,				٠.٠	
			F 0 0	Pro	Ala			585	•			n Ala	220		
		E 0 E		Leu			600	Pro	o Ile			000	,		Pro
Gln			a Arg	g Gly	Ser	Pro 619	Gly	v Va	l Se	r Gl	n Arg 620	g Lys	Leu	Met	Arg
	610 His	Ser	val	L Ser	Thr 630	Gl:	ı Thi	: Pr	o Hi	s Gl [.] 63	u Arg	g Lys	a Asp	Phe	Glu 640
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Arg	Arg	, His	s Se	645 r Trp	Arg	g Gl	n Glı	n Il 66	e Ph	e Le	u Ar	g Val	l Ala 670	a Thi	Pro
Gln	ГÀЗ			o s Ası	Se	r Se	r Se:	r Ar	g Ty	r Gl	u As	р Туі 689	r Sei	c Glu	ı Leu
Gly			u Pr	o Pro	o Ar	g Se	r Pr	o Le	u Gl	u Pr	o Va	1 Cy:	s Gl	ı Ası	o Gly
Pro	690 Phe	) = Gl	v Pr	o Pro	o Pr	69 o Gl	u Gl	u Ly	s Ly	s Ar			r Ar	g Gl	u Leu 720
					71	Λ				/ 1	.5			u Le	u Arg
				72	<u> </u>				/ 3	<b>.</b>				, ,	5 u Leu
			71	^				74	. 5				, ,	•	u Lys
			_				76	0				70	2		g Ser
	77	^				77	75				/ (	30			
705					79	90				/:	90				n Gly 800
Val	Pr			8.0	5				8	ΤO				0 -	
Phe	Hi	s Le		/s Hi 20	.s G]	ln Pl	ne Pi	co S:	er L 25	ys G	ln G	In Pr	0 Ly 83	s As	p Val

Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile 845 840 835 Leu Ile Asp Leu Gly Arg Thr Phe Pro Thr His Pro Tyr Phe Ser Ala 855 Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr 870 875 Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val 890 885 Ala Gly Ile Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met 905 Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro 920 915 Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu 940 935 His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile 955 950 Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser 970 965 Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu 985 Gln Gly Thr Glu Val Ile Phe Lys Val Ala Leu Ser Leu Leu Gly Ser 1005 1000 His Lys Pro Leu Ile Leu Gln His Glu Asn Leu Glu Thr Ile Val Asp 1015 1020 Phe Ile Lys Ser Thr Leu Pro Asn Leu Gly Leu Val Gln Met Glu Lys 1035 1030 Thr Ile Asn Gln Val Phe Glu Met Asp Ile Ala Lys Gln Leu Gln Ala 1050 1045 Tyr Glu Val Glu Tyr His Val Leu Gln Glu Glu Leu Ile Asp Ser Ser 1065 1070 1060 Pro Leu Ser Asp Asn Gln Arg Met Asp Lys Leu Glu Lys Thr Asn Ser 1085 1075 1080 Ser Leu Arg Lys Gln Asn Leu Asp Leu Leu Glu Gln Leu Gln Val Ala 1100 1095 Asn Gly Arg Ile Gln Ser Leu Glu Ala Thr Ile Glu Lys Leu Leu Ser 1110 1115 Ser Glu Ser Lys Leu Lys Gln Ala Met Leu Thr Leu Glu Leu Glu Arg 1130 1125 Ser Ala Leu Leu Gln Thr Val Glu Glu Leu Arg Arg Ser Ala Glu 1150 1145 1140 Pro Ser Asp Arg Glu Pro Glu Cys Thr Gln Pro Glu Pro Thr Gly Asp 1160 1165 <210> 6 <211> 18 <212> DNA <213> Artificial Sequence

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